

## CLAIMS

What is claimed is:

1. An orthopedic cutting guide device for use in  
resecting a portion of a bone, the device comprising:

5       a first member having a pivot, and configured to be  
anchored to the bone;

      a second member releasably secured to the first member;  
and

      a cut guide member releasably secured to the second  
10   member such that the cut guide member and the second member  
move together about the pivot of the first member when said  
second member is selectively released from said first member,  
wherein said cut guide member is further secured to said  
second member such that when the cut guide member is  
15   selectively released from said second member the cut guide  
member is thereby permitted to move with respect to said first  
member independently from said second member;

      whereby a surgeon selectively adjusts the device, prior  
to committing to a cut in the bone, in both a rotational and  
20   translational manner while at least a portion of the device is  
anchored to the bone.

2. The orthopedic cutting guide device of claim 1,  
wherein said device further comprises at least one securing  
member implanted within and protruding from the bone.

5        3. The orthopedic cutting guide device of claim 2,  
wherein the first member is anchored to the bone by the at  
least one securing member.

4. The orthopedic cutting guide device of claim 1,  
10        wherein said device further comprises a boom configured as a  
reference to aid the surgeon in making an anterior cut in the  
bone, and further aids in the avoidance of notching the bone.

5. The orthopedic cutting guide device of claim 4,  
15        wherein the cut guide member comprises a top surface and a  
bottom surface, said top surface having an opening therein  
configured for receiving a portion of the boom.

6. The orthopedic cutting guide device of claim 5,  
20        wherein the boom comprises a first end and a second end, the  
first end of said boom being dimensioned to fit within the  
opening of the cut guide member and configured and dimensioned  
to be secured therein.

7. The orthopedic cutting guide device of claim 2,  
wherein said first member comprises at least one through hole  
dimensioned for permitting the at least one securing member to  
pass therethrough.

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8. The orthopedic cutting guide device of claim 1,  
wherein said first member comprises a top surface, a bottom  
surface, an outer wall, a first end and a second end, said  
outer wall tapering outwardly from a central reference point  
10 toward the first end and the second end.

9. The orthopedic cutting guide device of claim 8,  
wherein said first end and said second end of said first  
member each act as the pivot, and are each shaped in a  
15 substantially rounded configuration.

10. The orthopedic cutting guide device of claim 9,  
wherein the tapering of the outer wall of the first member  
results in a height measured between the top surface and the  
20 bottom surface at the central reference point that is greater  
than a height measured between the top surface and bottom  
surface at the first end and the second end.

11. The orthopedic cutting guide device of claim 1,  
wherein said first member comprises a central through hole.

12. The orthopedic cutting guide device of claim 1,  
5 wherein said first member comprises a central through hole, a  
first side and a second side, wherein the first side and the  
second side each comprise a plurality of protrusions located  
medially and laterally of the central through hole of the  
first member for interacting with the second member and the  
10 cut guide member.

13. The orthopedic cutting guide device of claim 12,  
wherein said second member comprises a plurality of through  
holes, and said cut guide member comprises a plurality of  
15 through holes, such that the plurality of protrusions of the  
first side of the first member are inserted into the plurality  
of through holes of the second member, and the plurality of  
protrusions of the second side of the first member are  
inserted into plurality of through holes of the cut guide  
20 member, to thereby interact with one another during adjustment  
of the device.

14. The orthopedic cutting guide device of claim 1,  
wherein said second member comprises a plurality of through  
holes.

5           15. The orthopedic cutting guide device of claim 1,  
wherein said second member comprises a central through hole  
and at least one through hole located on either side of the  
central through hole.

10           16. The orthopedic cutting guide device of claim 1,  
wherein said second member comprises at least one  
translational through hole.

15           17. The orthopedic cutting guide device of claim 16,  
wherein said second member comprises a first end and a second  
end, and wherein said at least one translational through hole  
comprises a plurality of translational through holes, and  
wherein at least one of the plurality of translational through  
holes is located near each of the first end and the second end  
20   of the second member.

18. The orthopedic cutting guide device of claim 16,  
wherein said at least one translational through hole comprises  
a substantially elongated shape.

5        19. The orthopedic cutting guide device of claim 14,  
wherein the plurality of through holes comprises a central  
hole, a plurality of translational through holes, and a  
plurality of through holes located medially and laterally of  
said central through hole.

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20. The orthopedic cutting guide device of claim 15,  
wherein the at least one through hole is shaped in a  
substantially arcuate manner.

15        21. The orthopedic cutting guide device of claim 1,  
wherein said second member comprises a first protruding wall  
and a second protruding wall.

20        22. The orthopedic cutting guide device of claim 21,  
wherein said second member further comprises a first side and  
a second side, wherein said first protruding wall and said  
second protruding wall both protrude outwardly from the second

side of the second member in a substantially orthogonal manner.

23. The orthopedic cutting guide device of claim 22,  
5 wherein said first protruding wall and said second protruding wall are shaped in a substantially arcuate manner.

24. The orthopedic cutting guide device of claim 1,  
wherein said second member comprises a series of markings  
10 corresponding to a predetermined angle of rotation of the second member.

25. The orthopedic cutting guide device of claim 1,  
wherein said cut guide member further comprises a recessed  
15 surface and a sidewall defining a recessed area.

26. The orthopedic cutting guide device of claim 1,  
wherein said cut guide member further comprises an anterior portion and a posterior portion, said anterior portion having  
20 an anterior cutting guide and said posterior portion having a posterior cutting guide.

27. The orthopedic cutting guide device of claim 26,  
wherein said cut guide member further comprises a connecting  
portion located on the anterior side of the cut guide member,  
said connecting portion comprising an opening for receiving a  
5 boom therein.

28. The orthopedic cutting guide device of claim 12,  
wherein said cut guide member further comprises a plurality of  
substantially elongated holes configured for interacting with  
10 at least one of the plurality of protrusions.

29. The orthopedic cutting guide device of claim 1,  
wherein said cut guide member further comprises a plurality of  
receiving holes, each receiving hole configured for receiving  
15 an attachment member therein.

30. The orthopedic cutting guide device of claim 1,  
wherein the device further comprises an attachment member  
configured for releasably securing the second member to the  
20 first member, whereby the surgeon selectively loosens the  
attachment member thereby releasing said second member from  
the first member such that the second member and the cut guide  
member rotate together about the pivot of the first member.



31. The orthopedic cutting guide device of claim 1,  
wherein the device further comprises at least one attachment  
member configured for releasably securing the cut guide member  
to the second member, whereby the surgeon selectively loosens  
5 the at least one attachment member thereby releasing the cut  
guide member from the second member such that the cut guide  
member moves in said translational manner independent from  
both the second member and the first member.

10 32. The orthopedic cutting guide device of claim 1,  
wherein the cut guide member further comprises an anterior  
cutting guide formed in an anterior portion of said cut guide  
member.

15 33. The orthopedic cutting guide device of claim 32,  
wherein the anterior cutting guide slopes downwardly in a  
proximal to distal direction from a back surface to a front  
surface of the cut guide member such that a resulting anterior  
cut is tapered.

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34. The orthopedic cutting guide device of claim 32,  
wherein the anterior cutting guide is formed as a slit in the  
anterior portion of said cut guide member.

35. The orthopedic cutting guide device of claim 1,  
wherein the cut guide member further comprises a posterior  
portion having a posterior cutting guide that is configured  
and dimensioned as a template for making a posterior cut in  
5 the bone.

36. The orthopedic cutting guide device of claim 35,  
wherein the posterior cutting guide comprises a substantially  
flat surface that enables a surgeon to place a cutting  
10 instrument in contact with the substantially flat surface of  
said posterior cutting guide, such that a cut that is  
substantially straight and flat can be made.

37. The orthopedic cutting guide device of claim 35,  
15 wherein the posterior cutting guide is a bottom edge of the  
cut guide member.

38. An orthopedic cutting guide device for use in  
resecting a portion of a bone, the device comprising:  
20 a support member having a pivot, and configured to be  
anchored to the bone;  
a positioning member configured to be releasably secured  
to the support member; and

a cut guide member configured to be releasably secured to the positioning member, said cut guide member and said positioning member being secured to one another, such that the cut guide member and the positioning member move together when  
5 said positioning member is selectively released from the support member;

whereby a surgeon selectively adjusts the cut guide member and the positioning member in a rotational manner about the pivot of the support member, prior to committing to a cut  
10 in the bone, while at least a portion of the device is anchored to the bone.

39. The orthopedic cutting guide device of claim 38, wherein said device further comprises at least one securing  
15 member implanted within and protruding from the bone.

40. The orthopedic cutting guide device of claim 39, wherein the support member is anchored to the bone by the at least one securing member.

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41. The orthopedic cutting guide device of claim 39, wherein said support member comprises at least one through

hole for permitting the at least one securing member to pass therethrough.

42. The orthopedic cutting guide device of claim 38,  
5 wherein said support member comprises an outer wall, a first end and a second end, said outer wall tapers outwardly from a central reference point toward said first end and said second end.

10 43. The orthopedic cutting guide device of claim 42, wherein said first end and said second end of the support member each operate as the pivot, and are each shaped such that a substantially rounded configuration is achieved.

15 44. The orthopedic cutting guide device of claim 42, wherein the tapering of the outer wall results in a height at the central reference point that is greater than a height at the first end and the second end.

20 45. The orthopedic cutting guide device of claim 38, wherein said support member comprises a central through hole.

46. The orthopedic cutting guide device of claim 38,  
wherein said support member comprises a plurality of  
protrusions located medially and laterally of a central  
through hole of the support member configured for interacting  
5 with the positioning member.

47. The orthopedic cutting guide device of claim 46,  
wherein said positioning member comprises a plurality of  
through holes such that the plurality of protrusions of the  
10 support member are inserted into the plurality of through  
holes of the positioning member such that the plurality of  
protrusions interacts with the plurality of through holes  
during rotational adjustment of the device.

15 48. The orthopedic cutting guide device of claim 38,  
wherein said positioning member comprises a plurality of  
through holes.

49. The orthopedic cutting guide device of claim 38,  
20 wherein said positioning member comprises a central through  
hole and at least one through hole located on either side of  
the central through hole on the positioning member.

50. The orthopedic cutting guide device of claim 49, wherein the at least one through hole located on either side of the central through hole is substantially shaped in an arcuate manner.

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51. The orthopedic cutting guide device of claim 48, wherein the plurality of through holes comprises a central hole, a plurality of translational through holes, and a plurality of through holes located medially and laterally of said central through hole.

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52. The orthopedic cutting guide device of claim 38, wherein said positioning member comprises a first protruding wall and a second protruding wall, and said support member comprises a first end and a second end that each have a substantially rounded configuration.

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53. The orthopedic cutting guide device of claim 52, wherein said positioning member further comprises a first side and a second side, wherein said first protruding wall and said second protruding wall protrude outwardly from the second side of the positioning member in a substantially orthogonal manner.

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54. The orthopedic cutting guide device of claim 52,  
wherein said first protruding wall and said second protruding  
wall are each shaped in a substantially arcuate manner, such  
that the first protruding wall and the second protruding wall  
5 move about the substantially rounded first and second ends of  
the support member as the device is rotated, moving both the  
positioning member and the cut guide member together.

55. The orthopedic cutting guide device of claim 52,  
10 wherein the positioning member further comprises a plurality  
of substantially arcuate through holes, said first protruding  
wall and said second protruding wall are each shaped in a  
substantially arcuate manner, such that the first protruding  
wall and the second protruding wall move about the  
15 substantially rounded first and second ends of the support  
member as the device is rotated, moving both the positioning  
member and the cut guide member together within the confines  
of the plurality of substantially arcuate through holes.

20 56. The orthopedic cutting guide device of claim 38,  
wherein said positioning member comprises a series of markings  
corresponding to a predetermined angle of rotation of the  
positioning member.

57. The orthopedic cutting guide device of claim 38,  
wherein the device further comprises an attachment member  
configured for releasably securing the positioning member to  
the support member, whereby the surgeon selectively loosens  
5 the attachment member thereby releasing said positioning  
member from the support member such that the positioning  
member and the cut guide member rotate together about the  
pivot of the support member.

10 58. An orthopedic cutting guide device for use in  
resecting a portion of a bone, the device comprising:  
a support member configured to be anchored to the bone;  
a positioning member configured to be releasably secured  
to the support member; and  
15 a cut guide member configured to be releasably secured to  
the positioning member such that the cut guide member is  
selectively adjusted by releasing the cut guide member from  
said positioning member permitting the cut guide member to  
move independently from said positioning member and said  
20 support member;

whereby a surgeon selectively adjusts the cut guide  
member in a translational manner with respect to said support  
member and said positioning member, prior to committing to a



cut in the bone, while at least a portion of the device is anchored to the bone.

59. The orthopedic cutting guide device of claim 58,  
5 wherein said device further comprises at least one securing member implanted within and protruding from the bone.

60. The orthopedic cutting guide device of claim 59,  
wherein the support member is anchored to the bone by the at  
10 least one securing member.

61. The orthopedic cutting guide device of claim 58,  
wherein said device further comprises a boom configured as a reference point to aid the surgeon in making an anterior cut  
15 in the bone, and further aids in the avoidance of notching the bone.

62. The orthopedic cutting guide device of claim 61,  
wherein said cut guide member comprises a top surface and a  
20 bottom surface, said top surface having an opening therein configured for receiving a portion of the boom.

63. The orthopedic cutting guide device of claim 62, wherein said boom comprises a first end and a second end, the first end of said boom being dimensioned to fit within the opening of the cut guide member.

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64. The orthopedic cutting guide device of claim 59, wherein said support member comprises at least one through hole for permitting the at least one securing member to pass therethrough.

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65. The orthopedic cutting guide device of claim 58, wherein said support member comprises an outer wall, a first end and a second end, said outer wall tapers outwardly from a central reference point toward said first end and said second end.

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66. The orthopedic cutting guide device of claim 65, wherein said first end and said second end are each shaped such that a substantially rounded configuration is achieved.

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67. The orthopedic cutting guide device of claim 66, wherein the tapering of the outer wall results in a height at

the central reference point that is greater than a height at the first end and the second end.

68. The orthopedic cutting guide device of claim 58,  
5 wherein said support member comprises a central through hole.

69. The orthopedic cutting guide device of claim 58,  
wherein said support member comprises a plurality of  
protrusions located medially and laterally of a central  
10 through hole of the support member configured for interacting  
with the cut guide member.

70. The orthopedic cutting guide device of claim 69,  
wherein said cut guide member comprises a plurality of through  
15 holes, and wherein the plurality of protrusions of the support  
member are inserted into the plurality of through holes of the  
cut guide member, such that the plurality of protrusions  
interacts with the plurality of through holes of the cut guide  
member during adjustment of the device.

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71. The orthopedic cutting guide device of claim 58,  
wherein said positioning member comprises a plurality of  
through holes.

72. The orthopedic cutting guide device of claim 58,  
wherein said positioning member comprises at least one  
translational through hole.

5           73. The orthopedic cutting guide device of claim 72,  
wherein said positioning member comprises a first end and a  
second end, and wherein said at least one translational  
through hole comprises a plurality of translational through  
holes, at least one of the plurality of translational through  
10 holes being located at the first end and at the second end of  
the positioning member.

74. The orthopedic cutting guide device of claim 72,  
wherein said at least one translational through hole comprises  
15 a substantially elongated shape.

75. The orthopedic cutting guide device of claim 58,  
wherein said cut guide member further comprises a recessed  
surface and a sidewall defining a recessed area.

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76. The orthopedic cutting guide device of claim 58,  
wherein said cut guide member further comprises an anterior  
portion and a posterior portion, said anterior portion having

an anterior cutting guide and said posterior portion having a posterior cutting guide.

77. The orthopedic cutting guide device of claim 76,  
5 wherein said cut guide member further comprises a connecting portion located on the anterior side of the cut guide member, said connecting portion comprising an opening for receiving a boom therein.

10 78. The orthopedic cutting guide device of claim 69, wherein said cut guide member further comprises a plurality of substantially elongated holes configured for interacting with the plurality of protrusions.

15 79. The orthopedic cutting guide device of claim 78, wherein said support member comprises a pivot, and wherein said cut guide member and said positioning member are secured to one another such that they move together when said positioning member is selectively released from the support  
20 member, whereby the surgeon selectively adjusts the device by moving said cut guide member and said positioning member in a rotational manner about the pivot of the support member, such that the plurality of protrusions slide within the plurality

of substantially elongated holes of the cut guide member as said device is adjusted in said rotational manner, prior to the surgeon committing to a cut in the bone, while at least a portion of the device is anchored to the bone.

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80. The orthopedic cutting guide device of claim 58, wherein said cut guide member further comprises a plurality of receiving holes, each receiving hole configured for receiving an attachment member therein.

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81. The orthopedic cutting guide device of claim 58, wherein the device further comprises at least one attachment member configured for releasably securing the cut guide member to the positioning member, whereby the surgeon selectively loosens the at least one attachment member thereby releasing the cut guide member from the positioning member such that the cut guide member moves in said translational manner independent from both the positioning member and the support member.

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82. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member having a pivot, and configured to be anchored to the bone;

a positioning member configured to be releasably secured to the support member such that the positioning member is  
5 selectively moved with respect to the support member when said positioning member is released from said support member; and

a cut guide member configured to be releasably secured to the positioning member, said cut guide member and said positioning member being secured to one another such that they  
10 move together in a rotational manner about the pivot of the support member when said positioning member is selectively released from said support member, said cut guide member being further secured to said positioning member such that when the cut guide member is selectively released from said positioning  
15 member, the cut guide member is permitted to move in a translational manner with respect to the support member and the positioning member;

whereby a surgeon selectively adjusts the device, prior to committing to a cut in the bone, while at least a portion  
20 of the device is anchored to the bone.

83. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member having a pivot, and configured for being anchored to the bone;

a cut guide member configured for engaging the support member such that the support member engages at least a portion  
5 of the cut guide member; and

a means for attaching the cut guide member to the support member, such that the cut guide member is secured to said means for attaching and is selectively releasable from said means for attaching, thus permitting the cut guide member to  
10 move in a translational manner independent from and with respect to said support member and said means for attaching when said cut guide member is released from said means for attaching;

whereby a surgeon selectively adjusts the device, prior  
15 to committing to a cut in the bone, while at least a portion of the device is anchored to the bone.

84. The orthopedic cutting guide device of claim 83, wherein device further comprises a means for rotating said cut  
20 guide member and said means for attaching together about the pivot of said support member such that the device is rotationally adjusted.



85. The orthopedic cutting guide device of claim 84,  
wherein said means for rotating comprises an attachment member  
configured for releasably securing the means for attaching to  
the support member, whereby the surgeon selectively loosens  
5 the attachment member thereby releasing said means for  
attaching from the support member such that the means for  
attaching and the cut guide member rotate together about the  
pivot of the support member.

10 86. The orthopedic cutting guide device of claim 83,  
wherein said means for attaching further comprises a first  
protruding wall and a second protruding wall, and a plurality  
of substantially elongated through holes.

15 87. The orthopedic cutting guide device of claim 83,  
wherein said device further comprises at least one attachment  
member configured to secure the means for attaching to the cut  
guide member, and wherein said means for attaching comprises  
at least one translational through hole for receiving the at  
20 least one attachment member therethrough, whereby the surgeon  
selectively loosens the at the least one attachment member,  
thus releasing the cut guide member from the means for

attaching and enabling the cut guide member to move in said translational manner.

88. An orthopedic cutting guide device for use in  
5 resecting a portion of a bone, the device comprising:  
a support member having an outer surface defining the shape of the support member and a pivot located thereon, the support member configured for being anchored to the bone;  
a positioning member configured for being secured to the  
10 support member, such that the positioning member is selectively releasable from the support member; and  
a means for translating the device with respect to the support member, said means for translating configured to be attached to the positioning member such that the means for  
15 translating is selectively released from the positioning member permitting the means for translating to move independently from the support member and the positioning member;  
whereby a surgeon selectively adjusts the device, prior  
20 to committing to a cut in the bone, while at least a portion of the device is anchored to the bone.

89. The orthopedic cutting guide device of claim 88,  
wherein said device further comprises a means for rotating,  
which permits the positioning member to rotate about the pivot  
of the support member to adjust the device in a rotational  
5 manner.

90. The orthopedic cutting guide device of claim 88,  
wherein said means for translating comprises at least one wall  
surface partially defined by a sidewall, said at least one  
10 wall surface defining a translation area wherein the  
positioning member resides, said translation area having an  
anterior border and a posterior border providing the limits  
within which the positioning member moves in an anterior or  
posterior direction to thereby translate the device relative  
15 to said support member.

91. The orthopedic cutting guide device of claim 88,  
wherein the device further comprises an attachment member  
configured to attach the means for translating with the  
20 positioning member, such that when the attachment member is  
selectively loosened by the surgeon, the means for translating  
is released from said positioning member and permitted to move

in a translational manner with respect to said support member and said positioning member.

92. An orthopedic cutting guide device for use in  
5 resecting a portion of a bone, the device comprising:

a support member releasably secured to an end of the bone by a plurality of securing members;

a positioning member releasably secured to the support member; and

10 a cut guide member releasably secured to the positioning member, said cut guide member and said positioning member being secured to one another such that they move together when said positioning member is selectively released from said support member, wherein said cut guide member is further  
15 secured to said positioning member, such that when the cut guide member is selectively released from said positioning member the cut guide member is permitted to move with respect to said support member independently from said positioning member;

20 whereby a surgeon selectively adjusts the device in both a rotational and translational manner with respect to the end of the bone, without reattaching any of the plurality of securing members, prior to committing to a cut in the bone.

93. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member releasably secured to an end of the bone by a plurality of securing members;

5 a positioning member releasably secured to the support member; and

a cut guide member releasably secured to the positioning member, said cut guide member and said positioning member being secured to one another such that they move together when  
10 said positioning member is selectively released from the support member;

whereby a surgeon selectively adjusts the device in a rotational manner with respect to the end of the bone, without reattaching any of the plurality of securing members, prior to  
15 committing to a cut in the bone.

94. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member releasably secured to an end of the bone  
20 by a plurality of securing members;

a positioning member releasably secured to the support member; and

a cut guide member configured to be releasably secured to the positioning member such that the cut guide member is selectively adjusted by releasing the cut guide member from said positioning member permitting the cut guide member to  
5 move independently from said positioning member and said support member;

whereby a surgeon selectively adjusts the device in a translational manner with respect to the end of the bone, without reattaching any of the plurality of securing members,  
10 prior to committing to a cut in the bone.

95. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member comprising a pivot, and configured and  
15 dimensioned for being secured to an end of the bone;

a positioning member configured and dimensioned for being releasably secured to the support member, and having a first side and a second side, and further having protruding walls that protrude from the second side such that the protruding  
20 walls articulate with the pivot of said support member when said positioning member is released from said support member;  
and

a cut guide member configured and dimensioned for being releasably secured to the positioning member, and having a recessed surface and a sidewall defining a recessed area, said recessed area being dimensioned for receiving therein at least  
5 a portion of said support member and said positioning member such that at least a portion of said support member and at least a portion of said positioning member contacts at least one of said recessed surface and said sidewall.

10 96. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a support member having at least one through hole defined by a sidewall and dimensioned for receiving at least one securing member therethrough such that the support member is  
15 secured to an end of the bone;

a positioning member configured for being secured to said support member, and having a top surface and a bottom surface; and

a cut guide member configured for being secured to the  
20 positioning member, the cut guide member having a face, and a translation area, the translation area being defined by a wall surface, an anterior border, and a posterior border confining said positioning member such that said positioning member

moves freely in an anterior/posterior direction within the translation area until one of the top surface and the bottom surface of the positioning member moves into contact with one of the anterior border and posterior border.

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97. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a plurality of securing members configured for being inserted into and affixed to the bone;

10 a support member comprising a central through hole, a first end and a second end each having a substantially rounded configuration and acting as a pivot, the support member further comprising a plurality of through holes configured for permitting the plurality of securing members to pass  
15 therethrough, the plurality of through holes of the support member being dimensioned, such that the support member matingly engages and is fixed to the securing members to thereby anchor the device to the bone;

20 a positioning member comprising a first side, a second side, and a central through hole that is aligned with the central through hole of the support member, the positioning member further comprising at least one translational through hole, and at least one rotational through hole located



therein, said positioning member further comprising at least one protruding wall, the at least one protruding wall extending outwardly from the second side of the positioning member in an orthogonal manner, wherein the at least one  
5 protruding wall has a substantially rounded configuration such that the at least one protruding wall interacts with and pivots around one of the first end and the second end of the support member, said positioning member configured for being releasably secured to the support member;

10 a cut guide member comprising a top surface, a bottom surface, and at least one receiving hole located therein that is aligned with the at least one translational through hole of the positioning member, said cut guide member further having a recessed surface and a sidewall defining a recessed area,  
15 said cut guide member further comprising a translation area defined by an anterior border, a posterior border, and at least one wall surface that is raised with respect to said recessed surface, said cut guide member further comprising a plurality of through holes configured for permitting the  
20 plurality of securing members to pass therethrough and for fitting the cut guide member over the securing members, said cut guide member being releasably secured to the positioning member;

at least one rotational attachment member configured for passing through the central through hole of the positioning member to be received in the central through hole of the support member to thereby secure said positioning member to  
5 said support member; and

at least one translational attachment member configured for passing through the at least one translational through hole of the positioning member and being received in the at least one receiving hole of the cut guide member thus securing  
10 the cut guide member to the positioning member;

whereby loosening said at least one rotational attachment member releases the positioning member from the support member, such that the positioning member and the cut guide member are selectively rotated together with respect to said  
15 securing members; and

whereby loosening the at least one translational adjustment member releases the cut guide member from the positioning member such that the cut guide member is selectively translated with respect to the securing members  
20 independent from the support member and the positioning member.

98. The orthopedic cutting guide device of claim 97,  
wherein the device further comprises a boom having a first end  
and a second end, said boom being configured as a reference  
for a surgeon's use in making an anterior cut in the bone, and  
5 a connecting portion located on the top surface of the cut  
guide member, said connecting portion having an opening  
therein that is configured and dimensioned for receiving the  
first end of the boom.

10 99. A method of adjusting a mal-aligned cutting guide  
device on a first bone for use in resecting a portion of the  
first bone, the steps comprising:

evaluating a potential gap between a posterior cutting  
guide of the device, which is located on a distal portion of  
15 the first bone, and a proximally cut portion of a second bone  
utilizing a spacer block, prior to a surgeon resecting a  
posterior portion of the first bone to create a flexion gap;

adjusting said mal-aligned device in a rotational manner,  
said device comprising a cut guide member releasably attached  
20 to a positioning member, and the positioning member releasably  
attached to a support member, by releasing the positioning  
member from the support member permitting the positioning  
member and the cut guide member to move together in the

rotational manner until the posterior cutting guide and the proximally cut portion of said second bone are substantially parallel to each other while at least a portion of said device is anchored to said first bone.

5

100. The method of adjusting a mal-aligned cutting guide device of claim 99, wherein the method further comprises the step of:

adjusting a size of the potential gap in an  
10 anterior/posterior direction by releasing the cut guide member from the positioning member, while said support member and said positioning member are anchored to the first bone, enabling said cut guide member to move in a translational manner independently from the support member and the  
15 positioning member.

101. A method of adjusting a mal-aligned cutting guide device on a first bone for use in resecting a portion of the first bone, the steps comprising:

20 ascertaining the position of the mal-aligned device on the first bone, the device comprising a cut guide member releasably attached to a positioning member, the positioning member releasably attached to a support member;

evaluating a potential gap between a posterior portion of the cut guide member and a proximally cut portion of a second bone; and

adjusting a size of the potential gap in an  
5 anterior/posterior direction by releasing the cut guide member from the positioning member, while said support member and said positioning member are anchored to the first bone, enabling said cut guide member to move in said translational manner independently from the support member and the  
10 positioning member.

102. The method of adjusting the mal-aligned cutting guide device of claim 101, wherein the method further comprises the step of:

15 adjusting the mal-aligned device in a rotational manner by releasing the positioning member from the support member permitting the positioning member and the cut guide member to move together in the rotational manner until the posterior cutting guide and the proximally cut portion of said second  
20 bone are substantially parallel to each other while at least a portion of said device is anchored to said first bone.

103. A method of adjusting a mal-aligned cutting guide device on a first bone for use in resecting a portion of the first bone, the steps comprising:

evaluating a potential gap between a posterior cutting  
5 guide of the device and a proximally cut portion of a second bone such that the device, comprising a cut guide member, a support member, and a positioning member, is adjusted in a rotational manner to create a resulting flexion gap that is substantially parallel as measured between the posterior  
10 cutting guide of the device and the proximally cut portion in said second bone;

adjusting said device prior to committing to a posterior cut in said first bone, while said device is anchored to the first bone, by loosening at least one attachment member such  
15 that the positioning member is released from the support member while said support member is anchored to the first bone, to thereby permit the positioning member and the cut guide member to move together in said rotational manner; and

tightening said at least one attachment member thereby  
20 attaching the positioning member to the support member such that a surgeon makes a cut in the first bone that is substantially parallel to the proximally cut portion of the

second bone resulting in the substantially parallel flexion gap.

104. The method of adjusting the mal-aligned cutting  
5 guide device of claim 103, wherein the posterior cutting guide  
of the device used in the method is located on the cut guide  
member.

105. A method of adjusting a mal-aligned cutting guide  
10 device on a first bone for use in resecting a portion of the  
first bone, the steps comprising:

evaluating a potential gap between the first bone and a  
second bone such that the mal-aligned device, comprising a cut  
guide member, a support member, and a positioning member, is  
15 adjusted in a translational manner relative to a distal  
portion of the first bone to create a flexion gap between a  
posterior portion of the cut guide member and a proximally cut  
portion in said second bone, said gap being sized for  
receiving a prosthetic implant therein;

20 adjusting the size of the gap in an anterior/posterior  
direction, prior to a surgeon committing to a posterior cut in  
said first bone, by loosening at least one attachment member  
thereby releasing the cut guide member from the positioning

member while said support member and said positioning member are anchored to the first bone, such that the cut guide member moves in said translational manner independently from the support member and the positioning member; and

5           tightening said at least one attachment member after adjusting the size of the gap to a desired size thereby attaching the cut guide member to the positioning member such that the surgeon makes said posterior cut in the first bone.

10           106. A method of adjusting a mal-aligned cutting guide device on a first bone for use in resecting a portion of the first bone, the steps comprising:

          evaluating a gap between the first bone and a second bone such that the mal-aligned device, comprising a cut guide  
15   member, a support member, and a positioning member, is adjusted in both a rotational and translational manner relative to a distal portion of the first bone to create a resulting flexion gap that is substantially parallel as measured between a posterior portion of the cut guide member  
20   and a proximally cut portion of said second bone, said flexion gap being sized for receiving a prosthetic implant therein;

          adjusting the device to create the substantially parallel flexion gap by loosening at least one of a plurality of



attachment members thereby releasing the positioning member from the support member, and permitting the positioning member and the cut guide member to move in said rotational manner; and

5 further adjusting the device by loosening at least one of the plurality of attachment members thereby releasing the cut guide member from said positioning member and said support member, and permitting the cut guide member to move in a anterior/posterior direction in said translational manner.

10

107. A method of assembling a cutting guide device on a bone for use in resecting a portion of said bone, the steps comprising:

inserting a plurality of securing members into the bone;  
15 placing a cut guide member onto the securing members;  
anchoring a support member having a plurality of through holes to the securing members, said plurality of through holes being configured and dimensioned for receiving the securing members therein thus securing the device to the bone;

20 attaching a positioning member to the support member and the cut guide member, such that the positioning member is releasably attached to both the support member and the cut guide member;

adjusting the device by loosening at least one of a plurality of attachment members thereby releasing the positioning member from the support member permitting the positioning member and the cut guide member to move together  
5 in a rotational manner relative to the securing members; and

further adjusting the device by loosening at least one of the plurality of attachment members such that the cut guide member is released from the positioning member and the support member permitting the cut guide member to move in a  
10 translational manner relative to the securing members.

108. A method of assembling a cutting guide device on a bone for use in resecting a portion of said bone, the steps comprising:

15 placing a cut guide member onto at least one previously implanted securing member, said cut guide member having at least one through hole located therein for permitting the at least one securing member to pass therethrough;

affixing a support member to the at least one securing  
20 member, said support member having a pivot located thereon and at least one through hole defined by a sidewall for matingly engaging the at least one securing member such that the support member is fixed to the bone; and

releasably attaching a positioning member to the support member and to the cut guide member such that said cut guide member and said positioning member move together about the pivot of the support member when said positioning member is  
5 selectively released from said support member, and said cut guide member being secured to said positioning member such that when the cut guide member is selectively released from said positioning member the cut guide member is thereby permitted to move with respect to said support member  
10 independently from said positioning member, whereby a surgeon selectively adjusts the device, prior to committing to a cut in the bone, in both a rotational and translational manner while at least a portion of the device is anchored to the bone.

15

109. A method of adjusting a cutting guide device for use in resecting a portion of a first bone, the steps comprising:

positioning a cut guide member on the first bone;  
20 releasably securing a support member to a plurality of securing members;  
releasably securing a positioning member to the cut guide member and the support member;

evaluating a potential gap between a posterior portion of the cut guide member and a proximally cut portion of a second bone to determine whether the device is mal-aligned on the first bone, and to create a resulting gap that is

5 substantially parallel as measured between the posterior portion of the cut guide member and the proximally cut portion of the second bone;

adjusting said device in a rotational manner, without removing and reattaching the plurality of securing members,

10 prior to a surgeon committing to a posterior cut in said first bone, by releasing the positioning member from the support member such that the positioning member and the cut guide member move together in said rotational manner.

15 110. A method of adjusting a cutting guide device for use in resecting a portion of a first bone, the steps comprising:

positioning a cut guide member on the first bone;

releasably securing a support member to a plurality of

20 securing members;

releasably securing a positioning member to the cut guide member and the support member;

evaluating a potential gap located between a posterior portion of the cut guide member and a proximally cut portion of a second bone to determine mal-alignment of the device such that the mal-aligned device is selectively adjusted to  
5 increase or decrease a size of the potential gap between the posterior portion of the cut guide member and the proximally cut portion of the second bone;

adjusting said device in a translational manner, without removing and reattaching the plurality of securing members,  
10 prior to a surgeon committing to a posterior cut in said first bone, by releasing the cut guide member from the positioning member such that the cut guide member moves in said translational manner.

15 111. A method of surgically preparing a distal femur and a proximal tibia of a patient's knee joint to receive a prosthetic knee implant, the method comprising the steps of:

(a) exposing the patient's knee joint through a standard anterior midline incision;

20 (b) performing a distal femoral resection, including the steps of:

(i) drilling a hole in the distal femur to access a medullary canal in the femur, said hole designed to

parallel a femoral shaft of the femur in an anterolateral direction and a mediolateral direction;

5 (ii) inserting a fluted T-handle through the opening and into the medullary canal to decompress marrow content in the medullary canal, removing the T-handle from said medullary canal, sliding said T-handle through an intramedullary alignment guide forming a first assembly, setting the alignment guide at an appropriate valgus angle, and inserting the first assembly into the  
10 medullary canal such that the alignment guide contacts a prominent most femoral condyle to thereby align the T-handle and alignment guide with said medullary canal;

(iii) assembling a distal femoral cut guide to a cut guide scaffolding forming a second assembly and inserting  
15 the second assembly into the alignment guide until the distal femoral cut guide contacts an anterior cortex of the femoral condyles;

(iv) adjusting an amount of distal femur to be resected, and fixing the distal femoral cut guide to the  
20 anterior cortex;

(v) removing the T-handle, alignment guide, and cut guide scaffolding from the distal femur leaving only the distal femoral cut guide; and

(vi) resecting the amount of distal femur using a cutting instrument;

(c) performing a proximal tibial resection, including the steps of:

5           (i) positioning a tibial alignment guide having a top and a bottom on the patient's lower leg, positioning a tibial cut guide on the top of the tibial alignment guide, placing a tibial stylus on the tibial cut guide and adjusting the tibial stylus to a desired resection  
10           depth, and lowering the tibial cut guide onto the tibia until the tibial stylus contacts a tibial plateau;

          (ii) fixing the tibial cut guide to the proximal tibia and removing the tibial stylus; and

          (iii) resecting the tibial plateau using a cutting  
15           instrument such that the resection is substantially perpendicular to a tibial shaft;

(d) balancing an extension gap, including the steps of:

          (i) placing a spacer block within the extension gap to check said extension gap;

20           (ii) determining whether the extension gap is substantially rectangular in shape; and

(iii) adjusting the length of the patient's ligaments using a series of ligament releases until the extension gap is substantially rectangular in shape;

(e) sizing the prosthetic femoral component with the  
5 patient's knee in flexion, including the steps of:

(i) positioning a sizing guide having a femoral stylus and a paddle by centering said sizing guide on a surface of the distal femoral resection such that the femoral stylus of the sizing guide contacts the anterior  
10 cortex of the femur, and compressing the sizing guide until the paddle contacts at least one of the femoral condyles posteriorly; and

(ii) reading a marking on the sizing guide corresponding to the appropriate size prosthetic femoral  
15 component, placing a plurality of securing members through the sizing guide and into the distal femoral resected surface, and removing said sizing guide from the plurality of securing members;

(f) locating an appropriately sized cutting guide device  
20 on the surface of the distal femoral resection, said device comprising a cut guide member, a support member, a positioning member, and a plurality of attachment members, including the steps of:



(i) positioning the cut guide member, the support member and the positioning member over the plurality of securing members such that the support member is anchored to the distal femur via the plurality of securing members, and such that the positioning member is releasably secured to said support member, and the cut guide member is releasably secured to said positioning member; and

(ii) evaluating a potential flexion gap located between the distal femur and the proximal tibia prior to resecting a posterior portion of the distal femur to thereby determine if the cutting guide device is mal-aligned;

(g) adjusting the cutting guide device without removing any of the plurality of securing members in a rotational manner by loosening at least one of the plurality of attachment members thereby releasing the positioning member and the cut guide member from the support member such that the positioning member and the cut guide member rotate together about the plurality of securing members thereby rotating said cutting guide device, and thereafter tightening said at least one of the plurality of attachment members such that the flexion gap is created in a substantially parallel manner;

(h) checking the flexion gap with said spacer block prior to resecting the posterior portion of the distal femur to verify that the flexion gap is substantially equal to the extension gap;

5           (i) adjusting the cutting guide device without removing any of the plurality of securing members in a translational manner, if necessary, by loosening at least one of the plurality of attachment members thereby releasing the cut guide member from the positioning member and the support  
10 member such that the cut guide member moves in an anterior direction and in a posterior direction, relative to said plurality of securing members, and thereafter tightening said at least one of the plurality of attachment members such that the flexion gap is increased or decreased to substantially  
15 equal the size of the extension gap;

(j) performing a posterior distal femoral resection on a posterior side of said distal femur creating said flexion gap, and thereafter removing all instrumentation;

(k) checking said flexion gap with said spacer block to  
20 ensure an upper side of the flexion gap is substantially parallel with a lower side of said flexion gap, and to ensure that the flexion gap is substantially equal to the extension gap, and to further ensure that there is a desired fit between

the spacer block, the femur and the tibia when said spacer block is seated in said flexion gap, and if necessary, adding the necessary instrumentation to the plurality of securing members and re-rotating and re-translating the instrumentation  
5 accordingly and making any additional cuts that are necessary until the desired fit is obtained;

(l) performing a series of chamfer resections in the femur and otherwise preparing the tibia to thereby prepare said femur and said tibia to receive the prosthetic femoral  
10 component and the prosthetic tibial component, respectively, such that the patient's knee joint is replaced;

(m) performing a trial reduction; and

(n) attaching the prosthetic femoral component and prosthetic tibial component to their respective bones and  
15 otherwise finishing the surgical procedure.

112. An orthopedic cutting guide device for use in resecting a portion of a bone, the device comprising:

a first member having a first side, a second side, and a  
20 pivot, wherein at least one protrusion protrudes outwardly from the first side and the second side, wherein the first member is configured to be anchored to the bone;

a second member comprising at least one through hole defined by a sidewall, wherein the second member is releasably attached to the first member, and wherein the at least one protrusion of the first side of the first member contacts the  
5 sidewall of the at least one through hole in moveable engagement, such that the second member moves about the pivot of the first member when the second member is released from the first member; and

a cut guide member comprising an anterior cutting guide  
10 and a posterior cutting guide, wherein the cut guide member is releasably attached to the second member, such that the cut guide member and the second member move together about the pivot of the first member in a rotational manner when said second member is selectively released from said first member,  
15 wherein said cut guide member moves in a translational manner when the said guide member is selectively released from said second member, such that the cut guide member is permitted to move independently from said first member and said second member;

20 whereby a surgeon selectively adjusts the device, prior to committing to a cut in the bone, while at least a portion of the device is anchored to the bone.